

=> s (IL-1ra or interleukin-1 receptor antagonist#)

L1 5227 (IL-1RA OR INTERLEUKIN-1 RECEPTOR ANTAGONIST#)

=> s (IL-1ra-R or interleukin-1 receptor antagonist related)

L2 14 (IL-1RA-R OR INTERLEUKIN-1 RECEPTOR ANTAGONIST RELATED)

=> d l2 1-12 bib ab

L2 ANSWER 1 OF 14 MEDLINE

AN 2001138840 MEDLINE

DN 21030891 PubMed ID: 11192058

TI Physical activity and plasma interleukin-6 in humans--effect of intensity of exercise.

AU Ostrowski K; Schjerling P; Pedersen B K

CS The Copenhagen Muscle Research Centre, Rigshospitalet Afs 7652, Denmark.

SO Eur J Appl Physiol, (2000 Dec) 83 (6) 512-5.

Journal code: 100954790. ISSN: 1439-6319.

CY Germany: Germany, Federal Republic of

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 200103

ED Entered STN: 20010404

Last Updated on STN: 20010404

Entered Medline: 20010308

AB The present study included data from three marathon races to investigate

the hypothesis that a relationship exists between running intensity and

elevated concentrations of interleukin (IL)-6 in plasma. The study included a total of 53 subjects whose mean age was 30.6 [95% confidence

interval (CI) 1.4] years, mean body mass 77.7 (95% CI 2.0) kg, mean

maximal oxygen uptake (VO2max) 59.3 (95% CI 1.4) ml x min(-1) x kg(-1),

and who had participated in the Copenhagen Marathons of 1996, 1997 or

1998, achieving a mean running time of 206 (95% CI 7) min.

Running

intensity was calculated as running speed divided by VO2 max.

The

concentration of IL-6 in plasma peaked immediately after the run.

There

was a negative correlation between peak IL-6 concentration and

running

time ($r = -0.30$, $P < 0.05$) and a positive correlation between peak

IL-6

concentration and running intensity ($r = 0.32$, $P < 0.05$). The IL-1

receptor

antagonist (IL-1ra) plasma concentration peaked 1.5 h after the

run and

there was a positive correlation between the peak plasma concentrations of

IL-6 and ***IL*** - ***1ra*** (***r*** = 0.39, $P < 0.01$).

Creatine

kinase (CK) plasma concentration peaked on the 1st day after the

run, but

no association was found between peak concentrations of IL-6 and

CK. In

conclusion, the results confirmed the hypothesized association

between

plasma IL-6 concentration and running intensity, but did not confirm the

previous finding of a connection between IL-6 plasma concentration and muscle damage.

L2 ANSWER 2 OF 14 MEDLINE

AN 97225342 MEDLINE

DN 97225342 PubMed ID: 9071715

TI Lipopolysaccharide-binding protein and

bactericidal/permeability-

increasing factor during hemodialysis: clinical determinants and role of

different membranes.

AU Sundaram S; King A J; Pereira B J

CS Division of Nephrology, New England Medical Center, Boston, Massachusetts

02111, USA.

NC DK 45609 (NIDDK)

SO JOURNAL OF THE AMERICAN SOCIETY OF

NEPHROLOGY, (1997 Mar) 8 (3) 463-70.

Journal code: 9013836. ISSN: 1046-6673.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 199706

ED Entered STN: 19970620

Last Updated on STN: 19970620

Entered Medline: 19970611

AB The host response to the presence of lipopolysaccharide (LPS) is complex

and varied. Two closely related endogenous serum proteins, LPS-binding

protein (LBP) and bactericidal/permeability-increasing factor (BPI),

regulate delivery of LPS to CD14 antigen on effector cell surfaces and

modulate the host response to LPS. In the study presented here, plasma

levels of LBP and BPI were measured, predialysis, 15 min into dialysis and

postdialysis in patients dialyzed with cellulose,

cellulose-tri-acetate

(CTA), and polysulfone dialyzers. Further, the association between LBP

levels and BPI release during hemodialysis and clinical and laboratory

characteristics of patients, complement activation represented by plasma

C3a levels, and monocyte cytokine production represented by interleukin-1

receptor antagonist (IL-1Ra) synthesis was also studied.

Predialysis

plasma levels of LBP were 14,459 +/- 544, 13,889 +/- 1362 and 12,622 +/-

6305 ng/mL, respectively, with cellulose, CTA, and polysulfone dialyzers,

and postdialysis levels were 17,834 +/- 861, 20,979 +/- 8485 and 18,177

+/- 1656 ng/mL, respectively. Postdialysis plasma levels of LBP were

consistently higher than predialysis levels with all three dialyzers ($P <$

0.05). However, plasma LBP levels were not significantly different between

the three dialyzers either predialysis ($P = 0.28$) or postdialysis ($P =$

2.8). There were no significant differences in predialysis BPI levels

between the three dialyzers ($P = 0.21$). BPI levels at 15 min of

dialysis with CTA (10.91 +/- 3.65 ng/mL) and polysulfone (10.73 +/- 2.24 ng/mL) dialyzers were significantly greater ($P < 0.05$) than that observed with cellulose (5.49 +/- 0.66 ng/mL). Similarly, postdialysis levels with CTA and polysulfone were significantly greater ($P < 0.05$) than that observed with cellulose dialyzers. The percentage change in BPI levels between predialysis and 15 min was 1341 +/- 243%, 2935 +/- 1033%, and 3790 +/- 1151% for cellulose, CTA, and polysulfone dialyzers, respectively. The changes in BPI levels from predialysis to 15 min and between pre- and postdialysis samples were statistically significant for all three dialyzers ($P < 0.05$). Postdialysis LBP:BPI ratios were 50 +/- 6%, 18 +/- 4%, and 22 +/- 6% of predialysis ratios for cellulose, CTA, and polysulfone dialyzers, respectively. These changes were statistically significant ($P < 0.05$) for all three dialyzers. There was no significant correlation between baseline clinical or laboratory characteristics and predialysis LBP levels. Similarly, the correlation between BPI levels at 15 min of dialysis with the clinical and laboratory characteristics was also poor, with the exception of serum albumin ($r = 0.43$, $P = 0.008$). The correlation between BPI levels at 15 min of dialysis with plasma LBP levels ($r = -0.29$; $P = 0.08$), plasma C3a levels ($r = -0.1$; $P = 0.55$), peripheral blood mononuclear cells (PBMC) content of ***IL*** - ***IRa*** (***r*** = 0.01; $P = 0.94$), and IL-IRa production by unstimulated ($r = 0.13$; $P = 0.45$), and endotoxin-stimulated PBMC ($r = 0.32$; $P = 0.06$) was not statistically significant. The results of this study demonstrate that dialysis with cellulose, CTA, and polysulfone dialyzers results in a significant increase in LBP and BPI levels. BPI release is probably mediated by non-complement factors and may be related to the nutritional status of the patient. The release of BPI during HD and consequent lowering of the LBP:BPI ratio could potentially afford some protection against endotoxin in the dialysate.

L2 ANSWER 3 OF 14 MEDLINE

AN 96416422 MEDLINE

DN 96416422 PubMed ID: 8928570

TI [Practical significance of cytokine determination in joint fluid in patients with arthroses or rheumatoid arthritis].

Praktische Bedeutung der Zytokinbestimmung im Gelenkpunktat von Patienten

mit Arthrosen oder rheumatischen Arthritiden.

AU Neidel J; Schulze M; Sova L; Lindschau J

CS Abt. für Orthopädie, Rheumaklinik Bad Bramstedt,

Medizinische Hochschule

Hannover.

SO ZEITSCHRIFT FÜR ORTHOPÄDIE UND IHRE

GRENZGEBIETE, (1996 Jul-Aug) 134 (4)

381-5.

Journal code: 1256465. ISSN: 0044-3220.

CY GERMANY: Germany, Federal Republic of

DT Journal; Article; (JOURNAL ARTICLE)

LA German

FS Priority Journals

EM 199611

ED Entered STN: 19961219

Last Updated on STN: 20000303

Entered Medline: 19961114

AB OBJECTIVE: To determine whether the activity of cartilage-degrading

enzymes in the synovial fluid (SF) of patients with rheumatoid arthritis

and other joint diseases is correlated with the concentration of cytokines

in the SF. METHODS: Cytokines and cartilage-degrading enzymes were

determined in the SF of 97 patients with various disorders involving the

knee joints (rheumatoid arthritis (RA) n 44; osteoarthritis (OA) n 35;

meniscal trauma (Men) n 10; reactive arthritides (ReA) n 8). In these

samples we measured the concentrations of interleukin-1 alpha and beta,

IL-1-receptor antagonist (IL-1ra), IL-6, IL-8, tumor necrosis factor alpha

(TNF alpha; all by ELISA), collagenase-activity and caseinase-activity (by

substrate assays). RESULTS: With the exception of IL-1 alpha and IL-6,

cytokine-concentrations were significantly higher in RA than in OA

SF-samples ($p < 0.05$; ANOVA on ranks). IL-1ra, IL-6, and IL-1 beta were

correlated best with the collagenase-activity in the SF ($r = 0.63$; 0.57;

0.55; Spearman's rank correlation), while IL-1 beta ($r = 0.53$) and ***IL*** - ***IRa*** (***r*** = 0.52) were best correlated

with

the caseinase-activity in the samples. The SF-concentration of IL-1ra was

well correlated with the levels of IL-6, IL-1 beta, IL-8, and TNF alpha (r

from 0.73 to 0.66; all $p < 0.005$), but not with IL-1 alpha. The molar ratio

of IL-1 to IL-1ra in the SF was neither correlated with the activity of

collagenase nor caseinase. IL-1 beta and IL-1ra in the SF were positively

correlated with the erythrocyte sedimentation rate (ESR).

CONCLUSIONS: The

determination of IL-1 beta and IL-1ra in the SF of patients with joint

disorders as examined in this study seems to allow to a certain extent a

prediction of the collagenase- and caseinase-activity contained in the

diseased joint. We would favor.

L2 ANSWER 4 OF 14 MEDLINE

AN 96188960 MEDLINE

DN 96188960 PubMed ID: 8608647

TI Significance of IL-1 beta and IL-1 receptor antagonist (IL-1Ra) in

bronchoalveolar lavage fluid (BALF) in patients with diffuse panbronchiolitis (DPB).

AU Kadota J; Matsubara Y; Ishimatsu Y; Ashida M; Abe K; Shirai R; Iida K;

Kawakami K; Taniguchi H; Fujii T; Kaseda M; Kawamoto S; Kohno S

CS Second Department of Internal Medicine, Nagasaki University School of Medicine, Japan.
 SO CLINICAL AND EXPERIMENTAL IMMUNOLOGY, (1996 Mar) 103 (3) 461-6.
 Journal code: 0057202. ISSN: 0009-9104.
 CY ENGLAND: United Kingdom
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals
 EM 199605
 ED Entered STN: 19960605
 Last Updated on STN: 19960605
 Entered Medline: 19960528
 AB We evaluated the effect of erythromycin therapy on pulmonary function tests and the airway inflammatory response of patients with DPB. The number of neutrophils in BALF obtained from DPB patients was significantly higher than that of healthy volunteers. Treatment with erythromycin (600 mg/day for 12.9 +/- 9.5 months (mean +/- s.d.)) significantly reduced the total number of cells and neutrophils in the airway, and significantly improved pulmonary function tests. The levels of IL-1beta and IL-8 were significantly higher in DPB compared with healthy volunteers ($P < 0.05$, $P < 0.05$, respectively). IL-1Ra in patients is considered to have a weak inhibitory activity for IL-1beta, with approximately five-fold concentration of IL-1beta compared with that in healthy volunteers (approx. nine-fold concentration of IL-1beta). Erythromycin therapy significantly reduced these cytokines to levels comparable to those of healthy volunteers, and produced a trend toward reduction in the level of IL-1Ra in BALF. The level of IL-1beta correlated significantly with the concentration of neutrophils in BALF ($r = 0.72$, $P < 0.01$), as well as with the level of ***IL*** - ***1Ra*** (***r*** = 0.688, $P < 0.05$) and IL-8 ($r = 0.653$, $P < 0.05$). A nearly significant or significant correlation was observed between the concentration of neutrophils and levels of IL-1Ra or IL-8 in BALF ($r = 0.526$, $P = 0.053$ or $r = 0.776$, $P < 0.01$, respectively). There was also a significant relationship between FEV(1) and the concentration of neutrophils in BALF ($r = 0.524$, $P < 0.05$). Our results suggest that the relative amounts of IL-1beta and IL-1Ra or IL-8 may contribute, at least in part, to the neutrophil-mediated chronic airway inflammation in patients with chronic airway disease, and long-term erythromycin therapy may down-regulate the vigorous cycle between the cytokine network and neutrophil accumulation, with resultant reduction of neutrophil-mediated inflammatory response.

L2 ANSWER 5 OF 14 MEDLINE
 AN 95189896 MEDLINE
 DN 95189896 PubMed ID: 7883859

TI Soluble cytokine receptors and the low 3,5,3'-triiodothyronine syndrome in patients with nonthyroidal disease.
 AU Boelen A; Platvoet-Ter Schiphorst M C; Wiersinga W M
 CS Department of Endocrinology, University of Amsterdam, The Netherlands.
 SO JOURNAL OF CLINICAL ENDOCRINOLOGY AND METABOLISM, (1995 Mar) 80 (3) 971-6.
 Journal code: 0375362. ISSN: 0021-972X.
 CY United States
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Abridged Index Medicus Journals; Priority Journals
 EM 199504
 ED Entered STN: 19950425
 Last Updated on STN: 19950425
 Entered Medline: 19950411
 AB Cytokines have been implicated in the pathogenesis of the low T3 syndrome during illness. This is supported by our recent observation of a strong negative relationship between serum T3 and serum interleukin-6 (IL-6) in nonthyroidal illness (NTI). In the last few years, soluble cytokine receptors and cytokine receptor antagonists have been discovered in human serum. These proteins have the potential to further regulate cytokine activity. Therefore, we now studied the association between serum T3 and serum levels of soluble tumor necrosis factor-alpha (sTNF alpha R p55 and sTNF alpha R p75), soluble interleukin-2 receptor (sIL-2R), and the interleukin-1 receptor antagonist (IL-1RA) in 100 consecutive hospital admissions with a wide variety of nonthyroidal diseases. Patients were divided into group A (T3, ≥ 1.30 nmol/L; T4, ≥ 75 nmol/L; n = 41), group B (T3, < 1.30 nmol/L; T4, ≥ 75 nmol/L; n = 46), and group C (T3, < 1.30 nmol/L; T4, < 75 nmol/L; n = 13). Serum sTNF alpha R p55, sTNF alpha R p75, sIL-2R, and IL-1RA were lower in group A than in groups B and C [median values; sTNF alpha R p55, 1.25, 2.25, and 3.55 ng/mL ($P < 0.001$); sTNF alpha R p75, 2.02, 4.56, and 7.00 ng/mL ($P < 0.001$); sIL-2R, 184, 259, and 272 U/mL ($P = 0.0004$), respectively]. Serum IL-1RA levels were not different in the three groups (median values, 122, 193, and 258 pg/mL, respectively). Taking all patients together, a significant negative relation was found among serum T3 and sTNF alpha p55 ($r = -0.59$; $P < 0.0001$), sTNF alpha R p75 ($r = -0.55$; $P < 0.0001$), sIL-2R ($r = -0.54$; $P < 0.0001$), ***IL*** - ***1Ra*** (***r*** = -0.38; $P = 0.001$), and IL-6 ($r = -0.56$; $P < 0.0001$). A remarkable high correlation ($r = -0.70$; $P < 0.0001$) was found between serum T3 and a newly designed total score based on the summation of serum levels of IL-6 and the four soluble cytokine receptor proteins. IL-6 and the four cytokine receptor proteins were all significantly related to each other. Stepwise multiple

regression

indicated IL-6 and sTNF alpha R p75 as independent determinants of T3 [serum T3 = 2.09-0.32ln (sTNF alpha R p75) -0.15ln (IL-6); r = 0.70]. The variability in serum T3 was accounted for 35% by changes in ln (sTNF alpha R p75) and 14% by changes in ln (IL-6).(ABSTRACT TRUNCATED AT 400 WORDS)

L2 ANSWER 6 OF 14 MEDLINE

AN 95060548 MEDLINE

DN 95060548 PubMed ID: 7526306

TI Increased concentrations of cytokines interleukin-6 and interleukin-1

receptor antagonist in plasma of women with preeclampsia: a mechanism for endothelial dysfunction?

AU Greer I A; Lyall F; Perera T; Boswell F; Macara L M

CS Department of Obstetrics and Gynecology, Royal Infirmary, Glasgow,

Scotland, United Kingdom.

SO OBSTETRICS AND GYNECOLOGY, (1994 Dec) 84 (6) 937-40.

Journal code: 0401101. ISSN: 0029-7844.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Abridged Index Medicus Journals; Priority Journals

EM 199412

ED Entered STN: 19950110

Last Updated on STN: 19960129

Entered Medline: 19941213

AB OBJECTIVE: To determine if plasma concentrations of defined cytokines are

increased in women with preeclampsia, and to correlate any increases with

the elevated concentrations of the vascular cell adhesion molecule (VCAM)-1. METHODS: Twenty primigravidas with preeclampsia were compared to

20 healthy primigravidas. Plasma levels of cytokines, tumor necrosis

factor-alpha (TNF alpha), interleukin (IL)-6, IL-8, IL-1 beta, IL-1 receptor antagonist (IL-1ra), granulocyte

macrophage-colony-stimulating

factor (GM-CSF), and VCAM-1, were measured by enzyme-linked immunosorbent

assay. RESULTS: Concentrations of IL-6 and IL-1ra were significantly

higher (P < .01) in preeclamptic women (2.56 and 251.85 pg/mL, respectively) compared to normal pregnant patients (2.06 and 142.00 pg/mL,

respectively). There were no significant changes in concentrations of TNF

alpha, IL-8, GM-CSF, and IL-1 beta in preeclamptic patients (14.09, 50.52,

125.8, and 2.08 pg/mL, respectively) compared to normal patients (11.96

44.46, 121.3, and 2.01 pg/mL, respectively). Serum concentrations of

VCAM-1 were increased in women with preeclampsia (preeclamptic group 841.9

+/- 49.7 ng/mL, control group 560.2 +/- 47.9 ng/mL; t = 3.673, P < .001).

Interleukin-6 and IL-1ra concentrations correlated with VCAM-1 concentrations (IL-6: r = 0.539, z = 2.9, P < .005; ***IL*** -

1ra : ***r*** = 0.451, z = 2.428, P < .02).

CONCLUSIONS:

Increased cytokine concentrations may contribute to the endothelial damage

that occurs with preeclampsia and may explain the mechanism

underlying

leukocyte activation in this disorder. The increased cytokine concentration may also be responsible for the endothelial adhesion that accompanies preeclampsia.

L2 ANSWER 7 OF 14 CAPLUS COPYRIGHT 2002 ACS

AN 2001:435130 CAPLUS

DN 135:41824

TI DNA encoding human and murine ***interleukin*** - ***I***

receptor ***antagonist*** - ***related*** molecules

IN Saris, Christian M.; Giles, Jennifer; Mu, Sharon X.; Xia, Min; Bass,

Michael Brian; Craveiro, Roger

PA Amgen, Inc., USA

SO PCT Int. Appl., 190 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO.
DATE

PI WO 2001042304 A1 20010614 WO 2000-US32940 20001204

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,

CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,

HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,

LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,

SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,

YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,

DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,

BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI US 1999-170191P P 19991210

US 2000-188053P P 20000309

US 2000-194521P P 20000404

US 2000-195910P P 20000410

AB The present invention provides nucleic acid mols. encoding novel

Interleukin - ***I*** ***Receptor***

Antagonist -

Related (***IL*** - ***1ra*** - ***R***) polypeptides.

The cDNAs encoding human and murine ***IL*** - ***1ra*** - ***R***

were cloned and the expression in several human tissues were examd. by

either RT-PCR or in situ hybridization. ***IL*** - ***1ra***

- ***R*** was expressed in E. coli and mammalian cell and anti-***IL***

- ***1ra*** - ***R*** antibody was produced. The biol. activity of

IL - ***1ra*** - ***R*** was assessed in transgenic mice. The

invention also provides selective binding agents, vectors, host cells, and

methods for producing ***IL*** - ***1ra*** - ***R*** polypeptides.

The invention further provides pharmaceutical compns. and methods for the

diagnosis, treatment, amelioration, and/or prevention of diseases, disorders, and conditions assocd. with ***IL*** - ***IRa*** - ***R*** polypeptides.

RE.CNT 6 THERE ARE 6 CITED REFERENCES
AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 8 OF 14 CAPLUS COPYRIGHT 2002 ACS

AN 1996:259086 CAPLUS

DN 124:331889

TI Significance of IL-1.beta. and IL-1 receptor antagonist (IL-1Ra) in

bronchoalveolar lavage fluid (BALF) in patients with diffuse panbronchiolitis (DPB)

AU Kadota, J.; Matsubara, Y.; Ishimatsu, Y.; Ashida, M.; Abe, K.; Shirai, R.;

Iida, K.; Kawakami, K.; Taniguchi, H.; et al.

CS School Medicine, Nagasaki University, Nagasaki, 852, Japan

SO Clin. Exp. Immunol. (1996), 103(3), 461-6

CODEN: CEXIAL; ISSN: 0009-9104

DT Journal

LA English

AB We evaluated the effect of erythromycin therapy on pulmonary function

tests and the airway inflammatory response of patients with DPB.

The no.

of neutrophils in BALF obtained from DPB patients was

significantly higher

than that of healthy volunteers. Treatment with erythromycin

(600 mg/day

for 12.sum.9.+-.9.sum.5 mo (mean .+-. s.d.)) significantly reduced

the

total no. of cells and neutrophils in the airway, and significantly

improved pulmonary function tests. The levels of IL-1.beta. and

IL-8 were

significantly higher in DPB compared with healthy volunteers (P

<

0.sum.05, P < 0.sum.05, resp.). IL-1Ra in patients is considered

to have

a weak inhibitory activity for IL-1.beta., with approx. five-fold

concn.

of IL-1.beta. compared with that in healthy volunteers (approx.

nine-fold

concn. of IL-1.beta.). Erythromycin therapy significantly reduced

these

cytokines to levels comparable to those of healthy volunteers, and

produced a trend toward redn. in the level of IL-1Ra in BALF.

The level

of IL-1.beta. correlated significantly with the concn. of neutrophils

in

BALF ($r = 0.72$, $P < 0.01$), as well as with the level of ***IL***

-

IRa (***r*** = 0.688, $P < 0.05$) and IL-8 ($r = 0.653$,

$P <$

0.05). A nearly significant or significant correlation was obsd.

between

the concn. of neutrophils and levels of IL-1Ra or IL-8 in BALF (r

$= 0.526$,

$P = 0.053$ or $r = 0.776$, $P < 0.01$, resp.). There was also a

significant

relation between FEV1 and the concn. of neutrophils in BALF (r

$= 0.524$, P

< 0.05). Our results suggest that the relative amts. of IL-1.beta.

and

IL-1Ra or IL-8 may contribute, at least in part, to the

neutrophil-mediated chronic airway inflammation in patients with

chronic

airway disease, and long-term erythromycin therapy may

down-regulate the

vigorous cycle between the cytokine network and neutrophil

accumulation,

with resultant redn. of neutrophil-mediated inflammatory response.

L2 ANSWER 9 OF 14 CAPLUS COPYRIGHT 2002 ACS

AN 1995:437486 CAPLUS

TI Soluble cytokine receptors and the low 3,5,3'-triiodothyronine syndrome in

patients with nonthyroidal disease

AU Boelen, A.; Schiphorst, M. C. Platvoet-ter; Wiersinga, W. M.

CS Department of Endocrinology, Univ. of Amsterdam, Amsterdam, Neth.

SO J. Clin. Endocrinol. Metab. (1995), 80(3), 971-6

CODEN: JCEMAZ; ISSN: 0021-972X

DT Journal

LA English

AB Cytokines have been implicated in the pathogenesis of the low T3 syndrome

during illness. This is supported by our recent observation of a strong

neg. relationship between serum Tc and serum interleukin-6 (IL-6) in

nonthyroidal illness (NTI). In the last few years, sol. cytokine

receptors and cytokine receptor antagonists have been discovered in human

serum. These proteins have the potential to further regulate

cytokine

activity. Therefore, we now studied the assocn. between serum T3 and

and

serum levels of sol. tumor necrosis factor-.alpha. receptors

(sTNF.alpha.R

p55 and sTNF.alpha.R p75), soluble interleukin-2 receptor

(sIL-2R), and

the interleukin-1 receptor antagonist (IL-1Ra) in 100 consecutive

hospital

admissions with a wide variety of nonthyroidal diseases. Patients

were

divided into group A (T3, .gtoreq.1.30 nmol/L; T4, .gtoreq.75

nmol/L; n =

41), group B (T3, <1.30 nmol/L; T4, .gtoreq.75 nmol/L; n = 46),

and group

C (T3, <1.30 nmol/L; T4, <75 nmol/L; n = 13). Serum

sTNF.alpha.R p55,

sTNF.alpha.R p75, sIL-2R, and IL-1Ra were lower in group A

than in groups

B and C [median values: sTNF.alpha.R p55, 1.26, 2.25, and 3.55 ng/mL ($P <$

0.001); sTNF.alpha.R p75, 2.02, 4.56, and 7.00 ng/mL ($P <$

0.001); sIL-2R,

184, 259, and 272 U/mL ($P = 0.0004$), resp.]. Serum IL-1Ra

levels were not

different in the three groups (median values, 122, 193, and 258

pg/mL,

resp.). Taking all patients together, a significant neg. relation was

found among serum T3 and sTNF.alpha. p55 ($r = -0.59$; $P <$

0.0001),

sTNF.alpha.R p75 ($r = -0.55$; $P < 0.0001$), sIL-2R ($r = -0.54$; $P <$

0.0001),

IL - ***IRa*** (***r*** = -0.38; $P = 0.001$), and IL-6 ($r =$

-0.56; $P < 0.0001$). A remarkable high correlation ($r = -0.70$; $P <$

0.0001)

was found between serum T3 and a newly designed total score

based on the

summation of serum levels of IL-6 and the four sol. cytokine

receptor

proteins. IL-6 and the four cytokine receptor proteins were all

significantly related to each other. Stepwise multiple regression

indicated IL-6 and sTNF.alpha.R p75 as independent

determinants of T3

[serum T3 = $2.09 - 0.32 \ln (\text{sTNF.alpha.R p75}) - 0.15 \ln (\text{IL-6})$; $r = 0.70$].

The variability in serum T3 was accounted for 35% by changes in
In (sTNF.alpha.R p75) and 14% by changes in In (IL-6). In
conclusion, 1)
serum T3 is neg. related to serum sTNF.alpha.R p55,
sTNF.alpha.R p75,
sIL-2R, IL-1RA, and IL-6 in patients; and 2) sTNF.alpha.R p75
and IL-6 are
independent determinants of serum T3 in NTI, accounting for
35% and 14%,
resp., of the variability in T3. The results suggest that the sick
euthyroid syndrome is part of the acute phase response during
illness
generated by activation of the cytokine network.

L2 ANSWER 10 OF 14 USPTFULL

AN 2002:5759 USPTFULL

TI Interleukin-1 receptor antagonist and recombinant production
thereof

IN Ford, John, San Mateo, CA, United States

Pace, Ann, Scotts Valley, CA, United States

PA Hyseq, Inc., Sunnyvale, CA, United States (U.S. corporation)

PI US 6337072 B1 20020108

AI US 1999-348942 19990707 (9)

RLI Continuation-in-part of Ser. No. US 1999-287210, filed on 5
Apr 1999,

now abandoned Continuation-in-part of Ser. No. US

1999-251370, filed on

17 Feb 1999, now abandoned Continuation-in-part of Ser. No.

US

1999-229591, filed on 13 Jan 1999, now abandoned

Continuation-in-part of

Ser. No. US 1998-127698, filed on 31 Jul 1998, now abandoned

Continuation of Ser. No. US 1998-99818, filed on 19 Jun 1998,

now

abandoned Continuation of Ser. No. US 1998-82364, filed on 20

May 1998,

now abandoned Continuation-in-part of Ser. No. US

1998-79909, filed on

15 May 1998, now abandoned Continuation-in-part of Ser. No.

US

1998-55010, filed on 3 Apr 1998, now abandoned

PRAI WO 1999-US4291 19990405

DT Utility

FS GRANTED

EXNAM Primary Examiner: Spector, Lorraine

LREP Marshall, O'Toole, Gerstein, Murray & Borun

CLMN Number of Claims: 37

ECL Exemplary Claim: 1,15

DRWN 4 Drawing Figure(s); 4 Drawing Page(s)

LN.CNT 5025

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides novel nucleic acids, the novel
polypeptide sequences encoded by these nucleic acids and uses
thereof.

These novel polynucleotide and polypeptide sequences were
determined to

be a novel Interleukin-1 Receptor Antagonist.

L2 ANSWER 11 OF 14 USPTFULL

AN 2001:163320 USPTFULL

TI Anti-interleukin-1 receptor antagonist antibodies and uses
thereof

IN Ford, John, San Mateo, CA, United States

Pace, Ann, Scotts Valley, CA, United States

PA Hyseq, Inc., Sunnyvale, CA, United States (U.S. corporation)

PI US 6294655 B1 20010925

AI US 1999-417455 19991013 (9)

RLI Continuation-in-part of Ser. No. US 1999-348942, filed on 7
Jul 1999

Continuation of Ser. No. US 1999-287210, filed on 5 Apr 1999,

now

abandoned Continuation-in-part of Ser. No. US 1999-251370,
filed on 17

Feb 1999, now abandoned Continuation-in-part of Ser. No. US
1998-127698,

filed on 31 Jul 1998, now abandoned Continuation-in-part of
Ser. No. US

1999-229591, filed on 13 Jan 1999, now abandoned

Continuation of Ser.

No. US 1998-99818, filed on 19 Jun 1998, now abandoned ,

said Ser. No.

US 127698 Continuation-in-part of Ser. No. US 1998-82364,
filed on 20

May 1998, now abandoned , said Ser. No. US 99818

Continuation-in-part of

Ser. No. US 1998-82364, filed on 20 May 1998, now

abandoned

Continuation-in-part of Ser. No. US 1998-79909, filed on 15

May 1998,

now abandoned Continuation-in-part of Ser. No. US

1998-55010, filed on 3

Apr 1998, now abandoned

DT Utility

FS GRANTED

EXNAM Primary Examiner: Spector, Lorraine

LREP Marshall, O'Toole Gerstein, Murray & Borun

CLMN Number of Claims: 14

ECL Exemplary Claim: 1

DRWN 15 Drawing Figure(s); 14 Drawing Page(s)

LN.CNT 4656

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides novel nucleic acids, the novel
polypeptide sequences encoded by these nucleic acids and uses
thereof.

These novel polynucleotide and polypeptide sequences were
determined to

be a novel Interleukin-1 Receptor Antagonist. Also provided are
antibodies which bind the antagonist, methods of detecting the
antagonist, and kits containing the antibodies.

L2 ANSWER 12 OF 14 USPTFULL

AN 1999:132765 USPTFULL

TI Method of treatment of osteoarthritis with interleukin-1
receptor

antagonist

IN Pelletier, Jean-Pierre, St-Lambert, Canada

Martel-Pelletier, Johanne, St-Lambert, Canada

PA Arthro Lab Inc., Sherbrooke, Canada (non-U.S. corporation)

PI US 5972880 19991026

AI US 1996-612433 19960307 (8)

DT Utility

FS Granted

EXNAM Primary Examiner: Mertz, Prema

LREP ROBIC

CLMN Number of Claims: 3

ECL Exemplary Claim: 1

DRWN 2 Drawing Figure(s); 2 Drawing Page(s)

LN.CNT 745

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method and a composition for the preventative treatment of
osteoarthritis comprising the periodic administration to a
mammal

suffering of this disease of a composition comprising an amount
of Human

recombinant Interleukin-1 receptor antagonist effective for
reducing the

progression of lesions and cartilage degradation.